

## Detailed Listing of Significant MetroGIS Accomplishments - 2004 -

### **I. Regional Information Need/Data Solutions – Data Component:**

#### a. Addresses

The workgroup began meeting in March. The project scope involves defining a regional strategy to capture and maintain addresses for all occupiable units (both residential and non-residential), whereby the data can readily be shared among government interests that serve the seven-county, Minneapolis-St. Paul region. A key component of the group's work involved documenting the processes currently used in each county to capture and maintain address data records. The group has set a goal to submit its recommendation to the Coordinating Committee for consideration at its March 2005 meeting.

#### b. Emergency Preparedness

The workgroup continued to place emphasis on outreach efforts to demonstrate the benefits of GIS technology to officials in the emergency management community. Part of this outreach effort involved implementation of an Internet-based application to demonstrate GIS data currently available. Most importantly, the workgroup also conceptualized a regional strategy through which the seven counties would collaborate to gather and maintain several data themes fundamental to each of their efforts to support emergency service mandates. Testing and refinement will occur in January and February. This strategy is expected to be presented to the Coordinating Committee for consideration at its March 2005 meeting.

#### c. Existing Land Use:

The workgroup completed its review of options, vetted its conclusion with stakeholder interests, and obtained unanimous approval of its recommendation by the Coordinating Committee on December 15, 2004. Policy Board consideration is scheduled for January 26<sup>th</sup>. The recommendation was based upon a concept promoted by the American Planning Association to integrate several aspects of land use (e.g., structure type, function, and ownership) into a single data structure.

#### d. Highways and Roads:

A focus group was initiated by staff in late November to better understand street centerline data needs of the E-911 community. MetroGIS staff were aware of several local governments' efforts that were moving forward independently to deal with information needs that the regional Street Centerline dataset could not meet, given that it was primarily designed for geocoding and not routing purposes. This investigation was initiated to consider the merits of pursuing a collaborative regional solution and is proposed as a 2005 workplan initiative.

The workgroup met once in the Fall to discuss a strategy for when MnDOT completes the software development needed to support the anchor/segment model that was endorsed in 2003. The group expects to reconvene in 2005 to refine operational components of the model, including definition of terms.

#### e. Hydrology

An ad-hoc workgroup met once in 2004 to discuss a surface water-related pilot project while awaiting completion of the state's strategic plan for hydrology by the MN Governor's Council on Geographic Information. The workgroup expects to complete the referenced pilot in 2005 and also consider issues and opportunities relevant to the statewide effort that are important to resolve before moving forward on a course of action for the Metro Area.

#### f. Jurisdictional Boundaries

- Watershed District Boundaries. Washington County nearly completed a pilot study that will be used to shape regional policy related to data content and custodian responsibilities. The final recommendations are expected to be submitted to the Coordinating Committee by mid-2005.
- School District Boundaries. No work was initiated to identify an appropriate regional custodian due to a higher priority need to renegotiate a parcel data sharing agreement with each of the counties. [See Item III(a)]. (Washington County had previously completed a pilot project that defined the data content preferences.) This topic is proposed as a 2005 workplan initiative.

g. Land Cover

The extent of coverage is now up to 67 percent of the seven county region. Work is currently in progress to extend the coverage another 9 percent. An LCMR-funded project is also planned to extend the coverage another 12 percent for a total of 88 percent coverage. A map of the coverage status can be viewed at [http://www.metrogis.org/data/datasets/land\\_cover/mlccs\\_metro\\_progress\\_planned.pdf](http://www.metrogis.org/data/datasets/land_cover/mlccs_metro_progress_planned.pdf). In addition, during the past year major revisions to the system were implemented: changing how attributes are stored, re-working the manual, and improving the ArcView tool in response to feedback received from the users. In late 2005 or early 2006 another major revision of the system is anticipated once the DNR's new natural community classifications system is complete. A user forum to identify other desired improvement is tentatively proposed for the first half of 2005.

h. Parcels:

▪ Government and Academic Interests

- 1) On July 28<sup>th</sup> the Policy Board endorsed implementation of substantial enhancements to the regional parcel dataset, including expansion of the number of attributes from 25 to 55 and adding a parcel point database. These enhancements are scheduled for implementation with the January 2005 version of the dataset.
- 2) It was agreed that historical versions of the Regional Parcel Dataset will be supported and available via DataFinder to licensed users, once the 2004-2008 Parcel Data Sharing Agreement is executed.

*See Item III(a) regarding the provisions of the 2004-2008 Parcel Data Sharing Agreement.*

▪ Non-Profit and For-Profit Access

- 1) *Non-Profits:* A proposal was received in July from a consortium of neighborhood groups active in Hennepin and Ramsey Counties to investigate the potential for non-profit interests to access the regional dataset. A pilot project with Hennepin County was proposed to work out the specifics since neighborhood groups currently have access to Ramsey County parcel data via the Ramsey County Users Group.
- 2) *Others:* The County Data Producer Workgroup is expected to resume its investigation of ways to streamline licensing and distribution to non-government interests now that the licensing issues pertaining to the 2004-2008 Parcel Data Sharing Agreement [(Item III(a))] appear to have been resolved. This topic is proposed as a 2005 workplan topic.

i. Socioeconomic Characteristics of Areas

- On January 29<sup>th</sup>, the Policy Board endorsed MetroGIS hosting an Internet application to assist users of socioeconomic data discover existing sources of the data. The site now known as the MetroGIS Socioeconomic Resources Page ([http://www.datafinder.org/mg/socioeconomic\\_resources/index.asp](http://www.datafinder.org/mg/socioeconomic_resources/index.asp)) became operational in April. Three existing datasets were also targeted for minor modifications that would greatly expand their usability. Will Craig, who chaired the original workgroup, agreed to monitor work to accomplish these minor modifications.
- On October 27<sup>th</sup>, the Policy Board endorsed the University of Minnesota Population Center as the custodian for the MetroGIS Socioeconomic Resources Page. The statistics regarding to this site will be incorporated into the annual performance measurement report.

**II. Regional Information Need/Data Solutions –Application Component:**

- a) **Mailing Label Application:** The first regional application. It was developed by MetroGIS staff and runs on the Regional Parcel Dataset. A similar application developed by Carver County was used as the starting point. The County Data Producers Workgroup provided valuable feedback to convert the Carver County application into an application that provides seamless mailing label generation capability across the Metro Area. Once the 2004-2008 Data Sharing Agreement is executed [see Item III(a)], the availability of this application will be advertised.
- b) **Emergency Preparedness:** A prototype application was launched in April for testing and refinement. (See Item Ia.) Its primary purpose is to inform the emergency preparedness community of data resources available via the GIS community. A concept for the policies related to data content and roles and responsibilities needed to sustain the application was endorsed for further refinement by the Committee at its December meeting. The Policy Board also endorsed a policy of view-only access to parcel data at its July 28<sup>th</sup> meeting with understanding that approval from each county is required before actually

supporting this function. This approval process will begin once the 2004-2008 Data Sharing Agreement is executed.

- c) **ApplicationFinder Concept:** A strategy to help MetroGIS stakeholders discover existing applications that pertain to various business needs was conceptualized. On December 15<sup>th</sup>, the Committee authorized creation of a workgroup and tasked it with formalizing, for the Committee's consideration, a proof of concept for ApplicationFinder, in particular, to demonstrate that the desired functionality can not be adequately achieved through the use of the established Google web-search tool.

### **III. Special Studies/Projects –Leveraging Investments**

#### a. Next Generation (2004-2008) Regional Parcel Data Sharing Agreement

A 2004-2008 Parcel Data Sharing Agreement between the seven counties and Metropolitan Council was negotiated from January to September. Approval by each County and the Council occurred in November and December. This next generation agreement streamlines licensing procedures, expands access to government and academic interests throughout the US, and reinstates availability of parcel data via DataFinder that was lost for much of 2004 while this next generation agreement was under negotiation. The agreement also calls for online application for licensure. A prototype was developed and accepted for further testing by the counties.

#### b. Integration of DataFinder Café and State GeoIntegrator:

Consideration of a possible joint project to enhance DataFinder Café and integrate it into the state's geospatial data architecture was stalled from January to May because the Legislature had frozen grant funds that had been awarded for the State's portion of the project. Although these grant funds were released by late May, the talks were again stalled because anticipated costs exceeded available funds. A 2005 work plan initiative is proposed to investigate ways to enhance DataFinder Café solely as a MetroGIS project.

#### c. Metropolitan 911 Board GIS Project

MetroGIS support staff served on a workgroup that crafted a strategy to integrate GIS technology into the day-to-day operations of the region's 27 PSAPs, a strategy that was unanimously endorsed by the full Metropolitan 911 Board in March, and which resulted in the Board's hiring of a full time GIS Coordinator. This strategy is expected to play an important role in the region's efforts to deal with commonly needed information related to addressing for residences, business suites, and other locations important to the broader MetroGIS community.

#### d. Investigate Exchanging Parcel Data for Utility Infrastructure Data

Representatives from three utility companies were invited in 2003 to review the parcel dataset and decide whether it had value to their operations. This offer was renewed in February 2004. Two of the three expressed interest in further talks. Further consideration was postponed to concentrate on renewal of the GIS Data Sharing Agreements with the counties [Item III(a)].

#### e. Partnership with MnDOT

See Item I(d).

#### f. TOP (Technology Opportunity Project) Grant Project

In October, a consortium of neighborhood groups, U of M CURA, and public sector interests learned that they had been awarded a federal Department of Commerce TOP grant valued at over \$599,000, over a 3-year period. The value of access to the regional parcel dataset, by neighborhood groups, was cited as a local in-kind match. A pilot project has been proposed to investigate options to obtain the desired data access [See I(h)- Non-Profit]. The Staff Coordinator has been invited to participate on the project steering committee. The project is important to MetroGIS because in addition to assisting with a resolution to the access policy issue cited above, which is a topic that the Policy Board has assigned to the Coordinating Committee, this project also proposes to develop geospatial applications that address common information needs of the broader MetroGIS community.

#### h. Harvard Innovations in Government Award Application

In September, a first-round application was submitted to nominate MetroGIS for this award. (*Editor's note: On December 21 notice was received that MetroGIS's proposal did not make the 1<sup>st</sup> round cut.*) The top 5 proposals will each receive \$100,000 grants.

i. Metropolitan Council Participates in National Land Market Monitoring Project

The Metropolitan Council is participating in a project titled The National Demonstration Project on Land Market Monitoring. The project will develop and demonstrate GIS residential capacity analysis methods used at the Metropolitan Council and at four other organizations across the county. Other participating organizations include Portland OR, Sacramento CA, Orange County FL and the State of Maryland. Lincoln Institute of Land Policy is supporting the project and the University of Maryland, National Center for Smart Growth is leading the project. The extensive GIS data available through MetroGIS was key to the Council being selected as a participant in this project.

**IV. Data Discovery and Acquisition – Other than Topical Applications**

a. Enhance MetroGIS DataFinder

- DataFinder Café: ...See III(b), above
- Data User Information. MetroGIS again contracted with the firm Quova to produce a report to document the geographic location of the entities that download data from DataFinder. The finding was that over two-thirds of the downloading activity is to entities located within the seven county metro area and adjoining counties.
- ApplicationFinder Concept. See II-c, above

b. Promotion of DataFinder As A Common Tool – Leveraging the Investment:

- Washington County continued its use of the web server that supports Café to provide external Internet access to the county's parcel query application activity. Use of the Café server is saving the county approximately \$10,000 annually in Application Service Provider (ASP) fees plus the cost of hardware and software and related licensing expenses.
- Interest has been expressed by the cities of Coon Rapids and Maple Grove to use DataFinder to distribute their data.

**IV. Outreach**

a. Annual Report:

The 2003 Annual Report was distributed to over 1500 persons and handed out at several conferences and forums. The format was modified to comprise a brochure style with a single page insert specific to the reporting year. The brochure addresses the broad goals and benefits and the one-page insert summarizes the accomplishments that year. A copy can be viewed at [http://www.metrogis.org/about/annual\\_reports/index.shtml](http://www.metrogis.org/about/annual_reports/index.shtml).

b. Newsletter Articles:

Articles about MetroGIS's activities and accomplishments were submitted for publication in each of the quarterly issues of the statewide GIS/LIS newsletter.

c. General Information Web site - [www.metrogis.org](http://www.metrogis.org):

This website serves as MetroGIS's institutional memory and main vehicle for keeping participants informed. This site is averaging nearly 6,300 visits per month.

d. County GIS User Groups:

- Quarterly updates of MetroGIS's activities are provided to each user group. Staff attended as many user group meetings as possible to encourage use of adopted best practices and answer questions about MetroGIS's activities.
- Arranged for Council facilitator to assist Ramsey County GIS Users Group with strategic planning workshop.
- Arranged for Council facilitator to assist Scott County GIS Users Group with strategic planning workshop.

e. Coordination with **State (Beyond Metro)** Geospatial Activities/Information Requests:

- April 8: Staff Coordinator interviewed by Bemidji official regarding a proposed multi-county GIS initiative and lessons learned by MetroGIS that might be of value, in particular related to licensing of data and related intellectual property rights matters.
- The Staff Coordinator and David Arbeit served on a workgroup of the Governor's Council on Geographic Information charged with overseeing the development of a strategic plan for Minnesota's Spatial Data Infrastructure (MSDI). Many of the lessons learned through MetroGIS's efforts and its fundamental philosophies have been embedded into the resulting MSDI Plan that was

adopted by the Governor's Council in June (<http://www.gis.state.mn.us/MSDI>). The Staff Coordinator and David Arbeit (LMIC) and Robert Maki (DNR), both of whom are also members of the MetroGIS Coordinating Committee, will continue to serve on the MSDI Strategic Planning Workgroup into 2005.

- The Staff Coordinator participated on a workgroup of the Governor's Council with David Arbeit, member of the Coordinating Committee, which produced a guide for organizations interested in sharing geospatial data. Through a decision tree format, it leads the reader through the many requirements set forth in the Data Practices Act and offers proven options to address each. The final document can be viewed at <http://www.gis.state.mn.us/pdf/GeoDataExchange.pdf>
- Staff and Coordinating Committee members also served as liaisons to Council committees and workgroups: Emergency Preparedness, Hydrographic Data and Standards (Geospatial Infrastructure) Workgroups.

f. Coordination with **National/International** Geospatial Activities/Information Requests:

- January 28: United Kingdom official (Anna Courey) called to ask questions about MetroGIS's data sharing policies and practices in particular regarding emergency preparedness needs.
- January – April: The Staff Coordinator was interviewed via email and in person by Bastiaan Van Loenen, a student from the Netherlands, who selected MetroGIS as one of several examples of regional collaboration to study for his doctoral thesis.
- January 27: Staff Coordinator was interviewed by Memphis/Shelby County TN officials concerning organizational structure used by MetroGIS.
- May 7: Interviewed by Open GIS Consortium (OGC) study team. As a result, MetroGIS's experience is cited as the only regional example in an OGC publication released in April 2005 titled "Server Architecture Models for the National Spatial Data Infrastructure (NSDI) (online at [http://portal.opengeospatial.org/files/?artifact\\_id=9984&version=2&format=pdf](http://portal.opengeospatial.org/files/?artifact_id=9984&version=2&format=pdf)).
- September: The Australia and New Zealand Land Information Council and the Australian Local Government Association published a "toolkit" to enhance capacity of Australian local government in the use of spatial information. MetroGIS was the only non-local example.
- June 15: Staff Coordinator interviewed by LOGIC (Kentucky) regarding data sharing mechanisms.
- October 27: The Staff Coordinator was notified by Ian Massey, who is writing a book to be published by ESRI in April 2005, that MetroGIS had been selected as the North American example for a successful regional implementation of NSDI philosophies.
- December 9: The Staff Coordinator participated in the Geospatial Digital Rights Management (GeoDRM) Forum in Washington D.C. sponsored by the GeoData Alliance (GDA), Open Geospatial Consortium and the FGDC. The focus was intellectual property rights related to sharing of geospatial data and services. The GDA paid all travel expenses.

g. Formal Presentations:

- Jan. 8<sup>th</sup> Hennepin County GIS Users Group meeting, Minnetonka: MetroGIS staff summarized MetroGIS's functions and accomplishments, with specific emphasis on DataFinder and its availability for MetroGIS stakeholders to use to publish their data.
- Apr. 6 and 13<sup>th</sup> U of M Graduate Geography Course: MetroGIS staff summarized MetroGIS's functions and accomplishments, with specific emphasis on DataFinder and its role in achieving interoperability.
- June 4<sup>th</sup> Grand Valley, Michigan conference presentation. Methods used by MetroGIS to achieve collaboration on efforts to address common geospatial needs and impacts of these efforts. The conference host paid all travel expenses.
- Oct. 4<sup>th</sup> GIS/LIS Conference: MetroGIS staff summarized technical aspects of Web Mapping Services associated with access data via MetroGIS DataFinder.

## **V. Project Management/Administration**

- a. Administered Performance Measures Plan – quarterly reports to the Coordinating Committee. The 2003 Annual Report was presented to the Policy Board in January. The 2004 Annual Report is scheduled to be presented to the Coordinating Committee at the December 2004 meeting.

- b. Updated Operating Guidelines, effective July 28. (They can be viewed at [http://www.metrogis.org/about/history/ops\\_guidelines.pdf](http://www.metrogis.org/about/history/ops_guidelines.pdf) )
- c. Obtained Metropolitan Council approval of a 2005 budget for MetroGIS sufficient to achieve the proposed workplan.
- d. Maintained currency of information on [www.metrogis.org](http://www.metrogis.org) – the primary source of a wide variety of information about MetroGIS’s mission, accomplishments, benefits, participants, meeting schedules, projects and lessons learned, and endorsed policies.
- e. Maintained currency of metadata and data accessible via [www.datafinder.org](http://www.datafinder.org) - MetroGIS’s primary data distribution mechanism.
- f. Maintained licensing records for access to street centerline data (149) and redesigned the licensing support processes in anticipation of relicensure of entities to access the regional parcel dataset.
- g. Significant documents produced:
  - 2004 Annual Report ([www.metrogis.org/about/annual\\_reports/index.shtml](http://www.metrogis.org/about/annual_reports/index.shtml))
  - 2004 Performance Measurement Report ([http://www.metrogis.org/benefits/perf\\_measure/index.shtml](http://www.metrogis.org/benefits/perf_measure/index.shtml))
  - Regional Parcel Data Sharing Agreement with the seven counties. ([http://www.metrogis.org/about/history/agreement\\_3rd.pdf](http://www.metrogis.org/about/history/agreement_3rd.pdf))
  - A testimonial to the benefits of MetroGIS’s efforts to stakeholders was documented for the Metropolitan 911 Board. It can be viewed at <http://www.metrogis.org/benefits/testimonials/index.shtml>.
  - Preliminary application for Harvard’s Innovation in Government Award.
- h. Meetings supported by MetroGIS staff:
  - Policy Board (4)
  - Coordinating Committee (4)
  - Technical Advisory Team (1)
  - Business Information Needs - Workgroups, Data User Forums, Training, etc.:
    - ✓ Address Workgroup (7)
    - ✓ Emergency Preparedness Workgroup (3)
    - ✓ Existing Land Use Workgroup (1)
    - ✓ Parcel Workgroup (1)
    - ✓ Highway and Roads Workgroup (1)
    - ✓ County Data Producers Workgroup (7)
  - Special Events: none